

## REMEDIAL SITE ASSESSMENT DECISION - EPA REGION 7

SITE NAME: DeBruce GrainKDHE ID #: C2-087-73093 EPA ID#: KSN000706409Alias/Alternate Site Names: DeBruce Grain Elevator ExplosionCity: WichitaCounty: SedgwickState: KansasRefer to Report Dated: September 2014Report type: Site Inspection (SI)Report developed by: Kansas Department of Health and Environment/Bureau of Environmental Remediation (KDHE/BER)Project Manager: Nicholas Schneider, KDHE/BER

**DECISION:** The SI has verified an extensive release of carbon tetrachloride originating from the DeBruce Grain elevator. Multiple source areas appear to be present on the DeBruce Grain elevator, Occidental Chemical Corporation, and Atofina Chemicals facilities. The area of impacted domestic wells appears to be addressed by the alternate water supplies provided by Occidental Chemical.

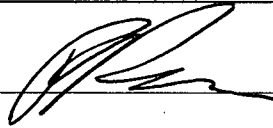
**DISCUSSION/RATIONALE:** The DeBruce Grain site is located in Wichita, Sedgwick County, Kansas. Between 1953 and 1955 the Garvey Grain Company constructed the elevator and operated at this location until 1996, when the facility was sold to DeBruce Grain, Inc. ("DeBruce Grain"). A major explosion occurred at the elevator in 1998. DeBruce Grain was acquired by Gavilon Grain, LLC, in 2010.

During the Preliminary Assessment (PA), 15 locations were chosen for direct-push groundwater samples at two discrete intervals (34 and 52 feet below surface). Carbon tetrachloride was detected at a maximum of 15,000 micrograms per liter ( $\mu\text{g/L}$ ) in the shallow interval at location PA-7-34, and 19,000  $\mu\text{g/L}$  in the deep interval at PA-15-52. Since multiple shallow sample intervals indicated carbon tetrachloride over 1,000  $\mu\text{g/L}$  on the southeastern side of the elevator, while none of the samples collected on the northwestern side indicated carbon tetrachloride over 1  $\mu\text{g/L}$ , the DeBruce Grain elevator appears to be a source of carbon tetrachloride contamination in groundwater. Multiple domestic wells were identified during the target distance search for the PA.

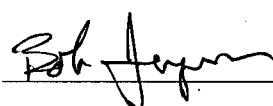
During the SI ten domestic wells were sampled, and groundwater samples were collected at two depth intervals at nine direct-push sampling locations. From the SI data carbon tetrachloride from the DeBruce Grain and/or Atofina Chemicals and Occidental sites appears to be impacting the Murray Gill Energy Center high-capacity industrial wells. Domestic wells to the north and northwest of the site do not appear to be impacted. The carbon tetrachloride groundwater plume appears to extend over one mile from the DeBruce grain elevator. Other domestic wells sampled by KDHE are not impacted, but could be potentially impacted in the future if corrective measures are not implemented.

The parent company of the DeBruce Grain elevator, Gavilon Grain, will be approached to participate in a KDHE cleanup program. The Atofina Chemicals site is being addressed by KDHE's Voluntary Cleanup Program, and the Occidental facility continues to be addressed by EPA's Resource Conservation and Recovery Act Corrective Action Program. This site should be entered with an "L" qualifier for the Expanded Site Inspection pending successful conclusion of an agreement with Gavilon Grain to address the DeBruce Grain site.

Report Reviewed and

Approved by: Randolph L. Brown, P.G., KDHE/BERSignature: Date: 09/09/2014

KDHE Site Decision Concurrence

Made by: Bob Jurgens, KDHE/BER/RemedialSignature: Date: 9/23/14  
09/16/14

EPA Site Decision Concurrence

Made by: Paul Roerman, Kansas SAM, EPA

Signature: \_\_\_\_\_

Date: \_\_\_\_\_